

SEMICONDUCTOR DEVICE, METHOD OF TESTING THE SEMICONDUCTOR
DEVICE AND SEMICONDUCTOR INTEGRATED CIRCUIT

5

ABSTRACT OF THE DISCLOSURE

10 A semiconductor device mounted on a board or the
like and having a test circuit, having the function of
carrying out a contact test at a low cost on the
terminals of the semiconductor, is disclosed. The
semiconductor device comprises a terminal test circuit
for testing a state of a contact of an external terminal
15 and a test mode control circuit unit. The test mode
control circuit unit outputs a signal indicating a first
operation mode upon application of a power supply voltage
thereto, outputs a test mode signal to the terminal test
circuit in response to a control signal input to a
20 specific terminal such as a chip select terminal, and
outputs a signal indicating a second operation mode in
response to the number of times in which the level of the
control signal input to the specific terminal changes.
Preferably, the first operation mode is a terminal test
25 mode, and the second operation mode is a normal operation
mode. A method of testing the semiconductor device and a
semiconductor integrated circuit, having the test
circuit, are also disclosed.